



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

Creating Resources from Wastewater

WEST POINT NEWS

Spring 2011

West Point Treatment Plant Project Update

A series of projects currently under way at King County's West Point Treatment Plant will increase operating efficiency, improve process safety and expand the production and use of renewable energy.

Waste-to-Energy Project: King County's Wastewater Treatment Division (WTD) has begun construction on a new cogeneration system at the plant that will convert digester gas into a source of heat and electricity for plant operations. When the new system begins operating in 2012, it will produce an equivalent amount of electricity needed to power nearly 2,300 homes.

Energy Efficient Blower Replacement Project: Blowers add needed oxygen to the wastewater treatment process to help bacteria break down organic matter. WTD will replace two blowers that have been in operation since the plant started up almost 50 years ago with new, energy-efficient turbo blowers. This will reduce electrical consumption, saving almost \$25,000 each year.

West Point Disinfection Upgrades: King County is converting the plant's disinfection system from chlorine gas to sodium hypochlorite, which is a safer and more

stable liquid that is similar to strong household bleach. The project is scheduled for completion this spring.

Screening Improvements: WTD is designing a project to upgrade and replace the screening equipment that filters out trash and other debris during the initial phase of the treatment process. In addition to complying with state regulations, the new equipment and screening facility will protect process equipment and improve the quality of our biosolids. The project is scheduled for completion by 2015.

Digestion System Improvements: Construction is under way on a project to upgrade the digestion system that processes organic solids and produces valuable resources such as biosolids to nourish soils and digester gas, which is used for power and heat. The project will be completed by the end of 2012.

West Point Office Annex: Construction will begin in 2011 on a permanent, modular office annex that will replace temporary construction trailers that have outlived their useful lifespan. The new office space will become available in 2012.

For additional information about the West Point Treatment Plant, please visit the Wastewater Treatment Division's website at <http://www.kingcounty.gov/wtd>

How King County Controls Odors at West Point Treatment Plant

The look—and smell—of West Point Treatment Plant has changed a lot since the plant was first dedicated in 1966. Processes like solids settling were once carried out in sludge lagoons on the South Beach at Discovery Park (photo below). Today, treatment processes are concentrated on the plant site, and the area surrounding the treatment plant has been restored for public use and enjoyment.



West Point Treatment Plant, 1974, with settling lagoons on the South Beach



West Point Treatment Plant after beach restoration

Odor Monitoring and Control Requirements

Although odors can be a problem in wastewater systems, King County works hard to be a good neighbor by monitoring and controlling odors at our facilities and making long-term improvements to odor control systems.

Both regulations and policies require King County Wastewater Treatment Division to monitor and control odors. West Point Treatment Plant is in compliance with odor control regulations established by Puget Sound Clean Air Agency and the City of Seattle.

King County's 1999 Regional Wastewater Services Plan (RWSP) includes policy guidance to prevent and control nuisance odor occurrences at all treatment plants and associated conveyance facilities and to carry out an odor prevention program that goes beyond traditional odor control. Odor complaints are summarized in the RWSP annual report at www.kingcounty.gov/environment/wtd/Construction/planning/rwsp/Library/AnnualReport.aspx

In 2003, the King County Council passed legislation requiring upgrades of odor control systems at both of King County's regional wastewater treatment

facilities. A phased plan for odor improvements was developed for each treatment plant, with a monitoring and evaluation period between phases. Phase I odor improvements were completed at West Point Treatment Plant in 2009, evaluation was completed, and some elements of Phase II are being implemented at this time.



Odor Scrubber Units

Being a Good Neighbor

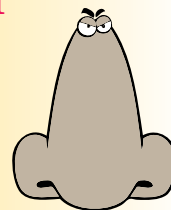
Controlling odors is a part of the normal operation of our treatment facility. We work to limit odors at West Point in a variety of ways:

- continuously monitor operations at our existing treatment plants;
- conduct routine odor monitoring at the plant perimeter;
- add chemicals to neutralize odor in the conveyance system seasonally, before wastewater arrives at the treatment facility;
- use covers, ventilation and odor scrubbers to limit potential odors from some processes;
- modify maintenance schedules and practices to reduce the potential for odors and impacts to park users;

- chlorinate wastewater entering the treatment plant on a seasonal basis; and
- respond to odor reports promptly and follow up with citizens after investigation.

For odor concerns or complaints, call

**West Point Treatment Plant
Odor Control Hotline
206-263-3840.**



DON'T FLUSH TROUBLE!

These items belong in the TRASH CAN!



Cleaning wipes



Disposable diapers,
nursing pads & baby wipes



Hair



Grease



Condoms



Facial wipes



Tampons and pads

Is it flushable?

The label might say "flushable," but disposable wipes and other products are clogging our sewer lines and damaging pumps and other equipment.

Not only are these problems expensive to fix, they can also cause raw sewage overflows into homes, businesses and local waterways. So, think trash, not toilets!

To learn more, including how to get rid of things you no longer want or need, visit us on the Web at <http://www.kingcounty.gov/wtd> or call the Wastewater Treatment Division at 206-684-1280 or 711 TTY.

Use the trash can, NOT the toilet!





**Department of
Natural Resources and Parks**
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Seattle, WA 98104-3855

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INSIDE:

- Update on projects at West Point Treatment Plant
- Odor control at West Point



West Point Beach today

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Meeting King County's Goals for Green Building

The new West Point Office Annex, scheduled for construction in 2011, will provide code-compliant, functional office space for plant staff, replacing older structures that could no longer be occupied. The project team developed a cost efficient design that follows King County's sustainability goals:

- King County plans to build the annex using modular construction techniques. Using

factory-built structures limits potential weather-related schedule delays that can occur with conventional building projects, reduces on-site construction staging requirements, and insures that the building meets State of Washington Department of Labor and Industries standards.

- The Annex design incorporates "green" building materials and energy efficient design. For example, energy use will be reduced by using high-rated insulation and heating the building with the plant's existing hot water loop.
- The landscape plan utilizes vegetation consistent with existing plantings, including drought-resistant species to minimize maintenance and plants that will complement existing evergreen vegetation with seasonal color. Over 60 percent of the trees, shrubs, and ground covers are native species, and remaining non-native plants are well suited to our climate, requiring little maintenance after establishment.